

IN THE SPECIFICATION

Please replace the paragraph at page 2, lines 4-16, with the following rewritten paragraph:

The conventional cellular phone 500 has the confidentiality processing unit 540 within the radio communication unit 530. Accordingly, the data to be processed by the confidentiality processing unit 540 is stored in the physical layer (layer 1). At the physical layer, it is impossible to discriminate data between user data and control data. Data sent/received by the cellular phone includes various kinds of data such as user data or signaling data, and it is required to perform data confidentiality processing based on the data kinds, or to ensure data integrity depending on the significance of the data. As shown in the conventional architecture, since the confidentiality processing unit 540 is provided to the layer 1, ~~the data cannot be performed~~ neither the confidentiality processing nor the integrity processing can be performed based on the kind of data kind because it is impossible to discriminate the data kinds at the layer 1.

Please insert the following section heading on page 2, after the paragraph ending at line 16 and before the paragraph beginning at line 17, as follows:

SUMMARY OF THE INVENTION

Please delete the sub-section heading at line 17 as follows:

~~Disclosure of the Invention~~

Please replace the paragraph beginning at page 15, line 19, through page 16, line 10, with the following rewritten paragraph:

The radio communication control unit 20 controls the whole mobile station (MS) 100. The radio communication control unit 20 is provided with a hardware circuit including a CPU, a ROM, a RAM, a firmware, and the like, or software module. The radio communication control unit 20 processes data between the terminal IF unit 10 and the radio communication unit 30. The radio communication control unit 20 converts data based on rules defined by the standard or the protocol. In particular, the radio communication control unit 20 processes data of layer 2 or upper levels of layer, by such functions as packeting or concatenating the data. The radio communication control unit 20 can discriminate the data kind, because the radio communication control unit 20 processes the data of layer 2 or upper. Accordingly, the radio communication control unit 20 can judge if certain data should undergo the confidentiality processing or the integrity processing based on the data kind. It is impossible to discriminate the data kind at the layer 1, and therefore it is impossible to judge whether the data at the layer 1 should ~~be performed~~ have the confidentiality processing or the integrity processing performed thereon.

Please replace the paragraph at page 18, lines 3-9, with the following rewritten paragraph:

The confidentiality processing and the integrity processing can be performed by the same circuit or algorithm, or by a similar circuit or a similar module. Accordingly, as shown in Fig. 4, the confidentiality processing and the integrity processing can be performed by a single module 411. In the case of Fig. 4, it is possible to reduce the hardware ~~resourcee~~ resources and the software ~~resousee~~ resources. Hereinafter, a “module” refers to ~~[[the]]~~ ones implemented either by hardware or software only, or by combining the both tools.